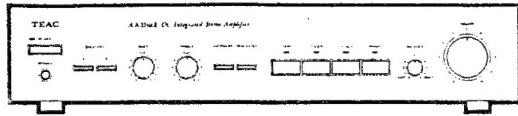


# TEAC<sup>®</sup>



## SERVICE MANUAL

# A-X35mkII

**DC Integrated Stereo Amplifier**

### NOTES

1. In this manual, 0 dB is referenced to 1V.
2.  $\triangle$  Parts marked with this sign are safety critical components. They must always be replaced with identical components – refer to the appropriate parts list and ensure exact replacements.
3. PC boards shown are viewed from foil side.

## 1 SPECIFICATIONS

### Power Output

35 Watts per channel minimum RMS, both channels driven at 8 ohms.

### Total Harmonic Distortion

AUX input to SPEAK 0.3% (20---20kHz, at 35W+35W Output Power)

### Frequency Response

25 Hz to 32 kHz 0/-3dB

### Input sensitivity/Impedance

Phono 2---4mV/47 kohm

Tuner, CD/AUX, TAPE 80---120mV/47kohm

### Signal-to-Noise Ratio (IEC-A)

Phono 65dB

Tuner, CD/AUX, Tape 87dB

### Output level/Impedance

Tape REC 80---120mV/47kohm

### Tone Control

Bass +/-10dB at 100Hz

Trable +/-10dB at 10kHz

### Loudness Control

+8dB at 100Hz (at -30dB VOLUME level)

### High Filter

-6dB at 10kHz

### Power Requirement

110/220V AC, 50/60Hz, 160W (General Export)

120V AC, 60Hz, 160W (USA/CANADA)

220V AC, 50Hz, 160W (Europe)

240V AC, 50Hz, 160W (UK/Australia)

### Dimensions

435x90x300 mm (17 $\frac{1}{8}$ " x 3 $\frac{1}{2}$ " x 11 $\frac{1}{8}$ " )

### Weight

5.7kg (12.5lbs.)

- Improvements may result in specification or feature changes without notice.

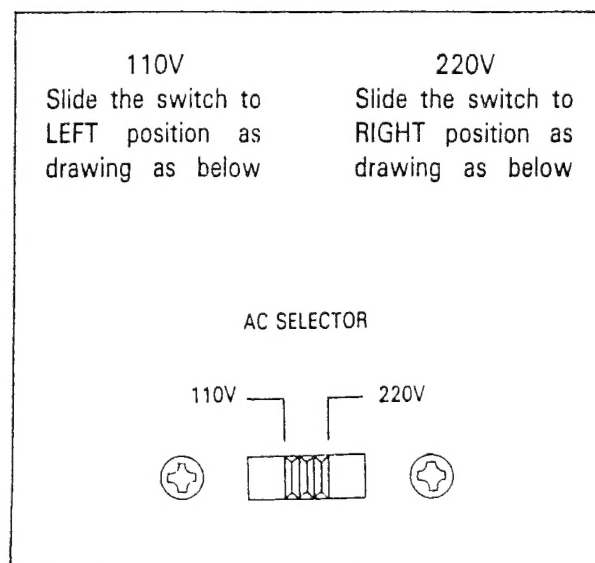
## 2 VOLTAGE CONVERSION

(FOR GENERAL EXPORT MODELS ONLY)

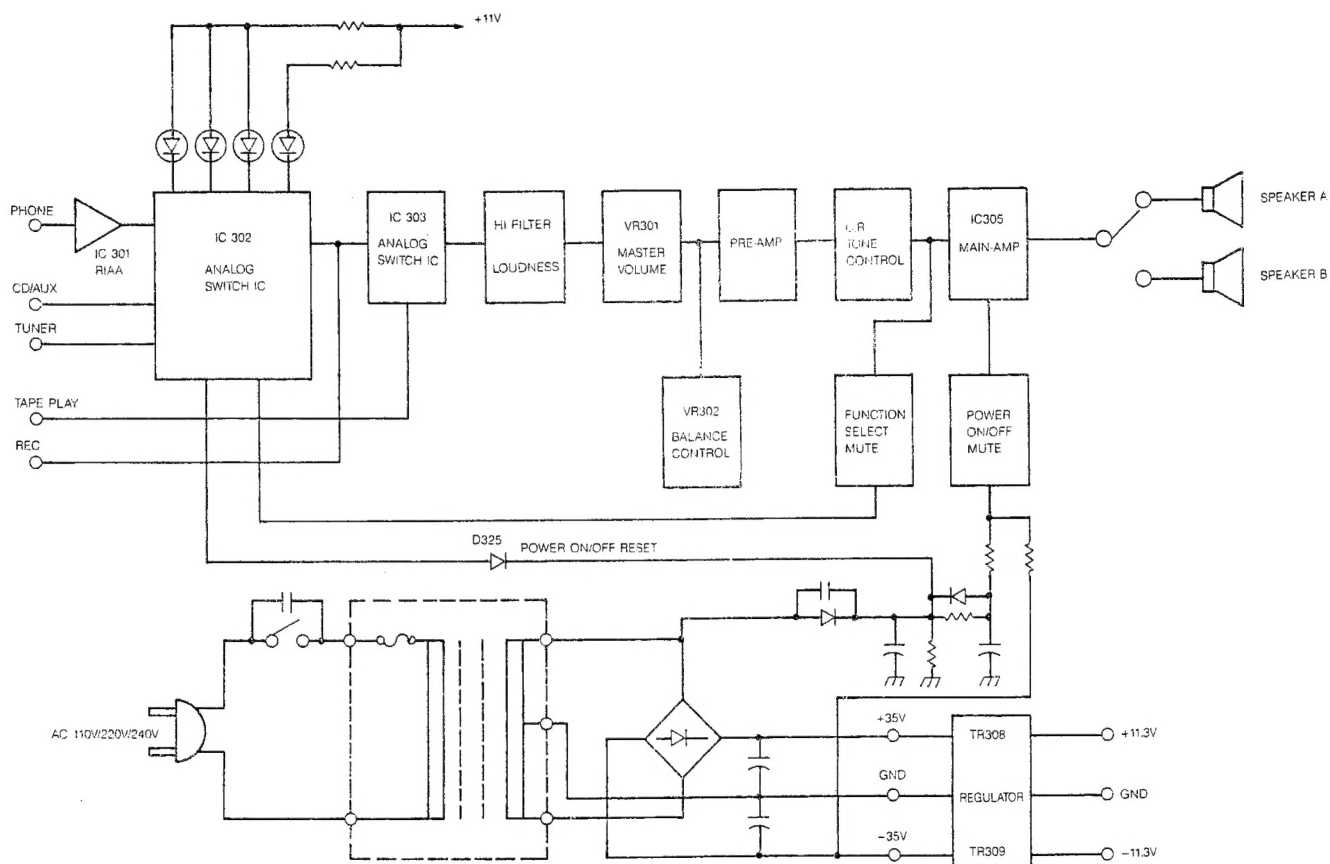
### AC VOLTAGE SELECTION

This unit operates on 110 volts or 220 volts AC.

Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

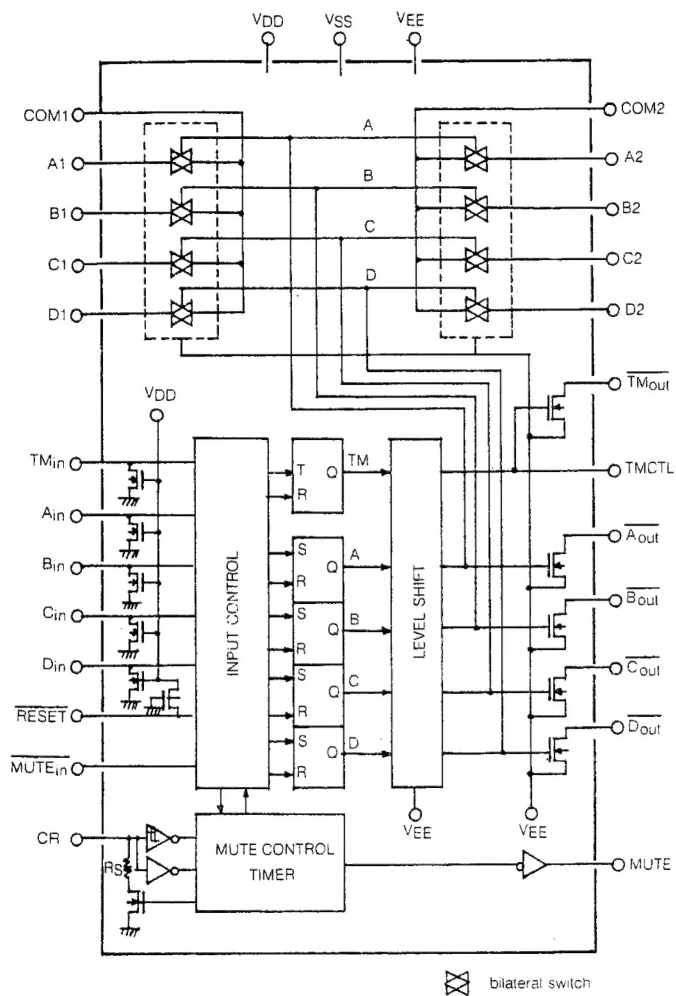


## 3 BLOCK DIAGRAM

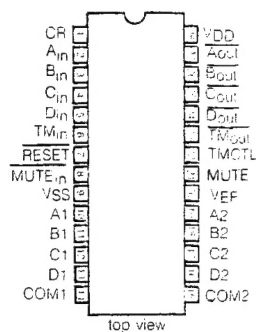


## 4. IC BLOCK DIAGRAM

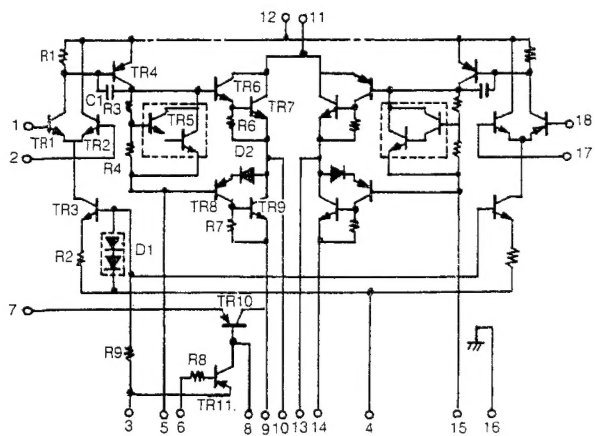
LC7815 Equivalent Circuit Block Diagram



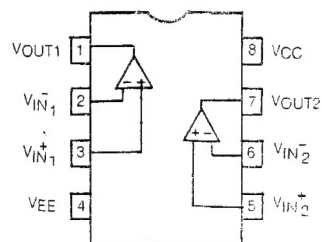
Pin Assignment



STK4171II Equivalent Circuit Diagram

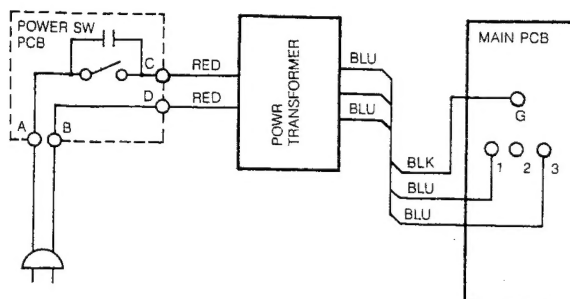


LA6458D (TA75558P)  
Equivalent Circuit Diagram

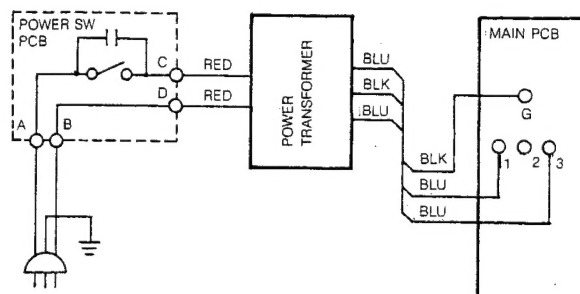


## 5. WIRING DIAGRAM

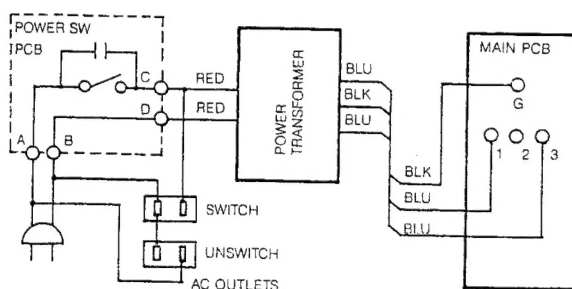
AC 220V 50Hz (VDE)



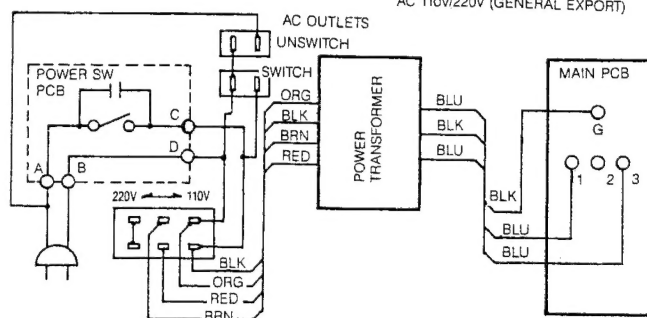
AC240V 50Hz (UK, AUSTRALIA)



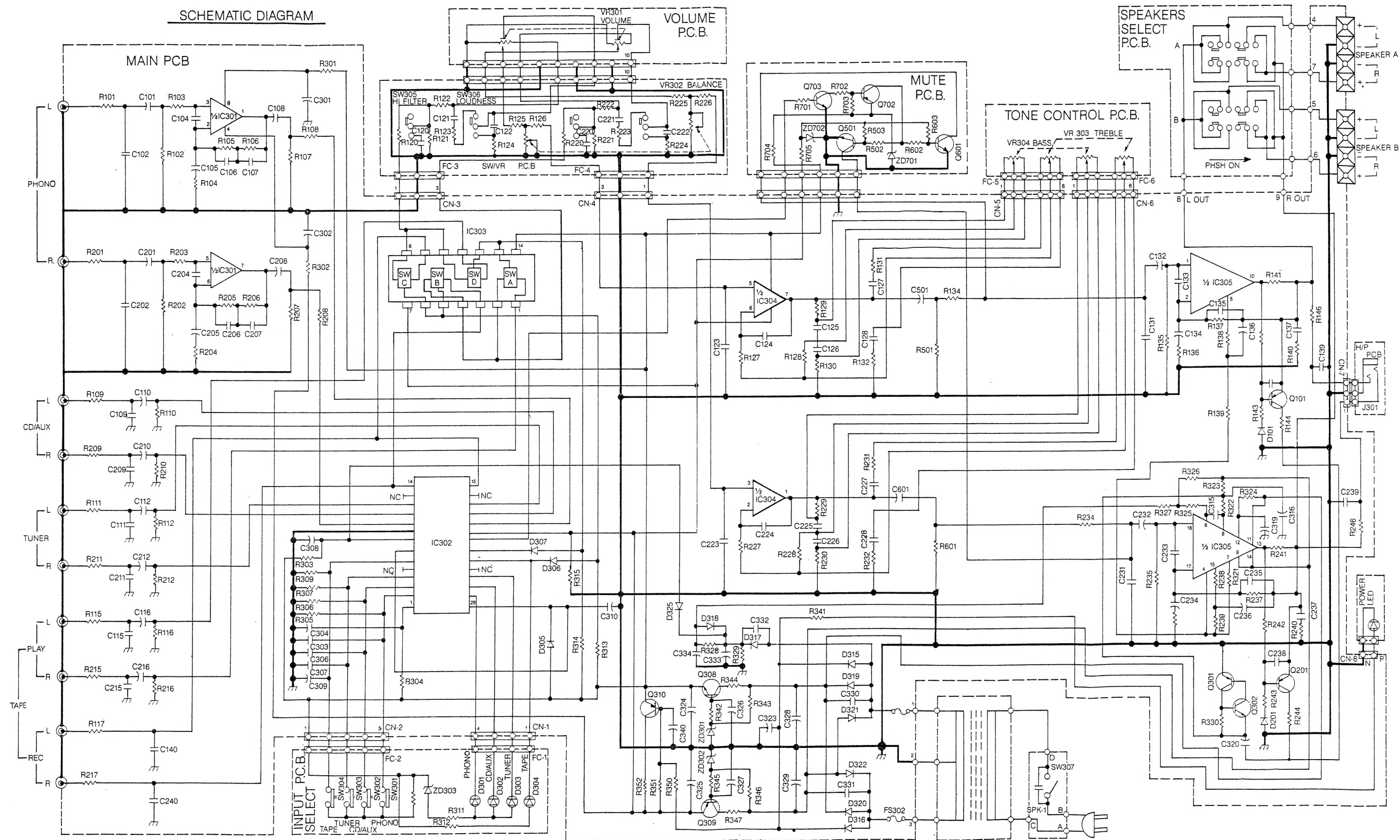
AC/20V 60Hz (UL/CSA)



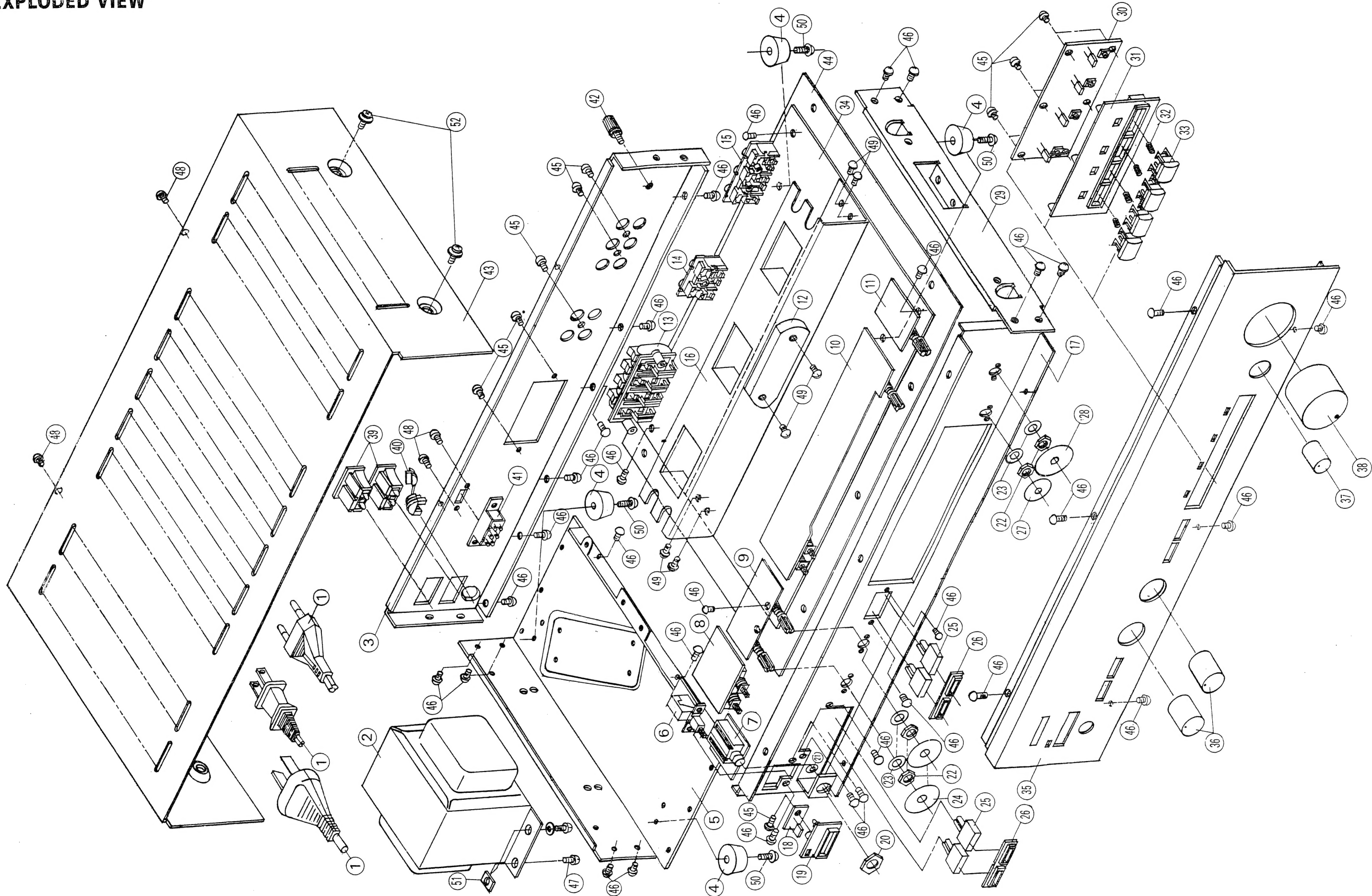
AC 110V/220V (GENERAL EXPORT)



## 6 SCHEMATIC DIAGRAM



7. EXPLODED VIEW



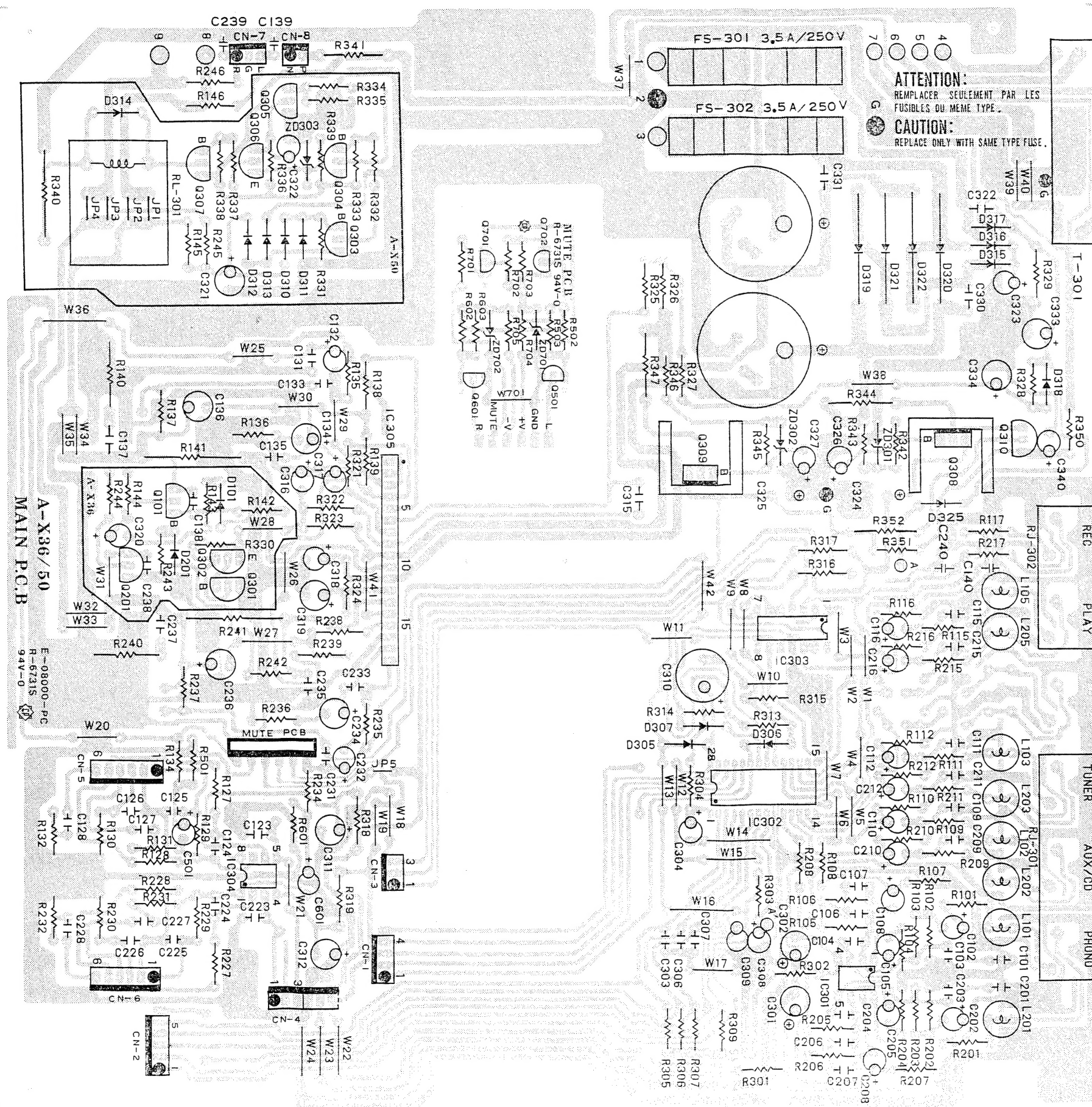
## 8 EXPLODED VIEW PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1.	E-WI-010-00	Power supply cord, SAA	
	E-WI-008-00	Power supply cord, EX	
	E-WI-009-00	Power supply cord, VDE	
	E-WI-011-00	Power supply cord, UK	
	E-WI-012-00	Power supply cord, UL/CSA	
2.	E-PT-008-00	Power transformer, VDE	
	E-PT-009-00	Power transformer, EX	
	E-PT-010-00	Power transformer, UL/CSA	
	E-PT-011-00	Power transformer, UK/SAA	
3.	F-PN-009-00	Rear panel, VDE	
	F-PN-010-00	Rear panel, UK/SAA	
	F-PN-011-00	Rear panel, EX	
	F-PN-012-00	Rear panel, UL/CSA	
4.	F-RB-006-00	Rubber feet	
5.	F-CH-014-00	Side chassis, Left	
6.	Z-SD-015-00	Power SW P.C.B. ass'y	
7.	E-JK-016-00	Headphone jack	
8.	Z-SB-016-00	Speaker select P.C.B. ass'y	
9.	Z-SB-014-00	Tone control P.C.B. ass'y	
10.	Z-SB-011-00	VR/SW P.C.B. ass'y	
11.	Z-SB-013-00	Volume P.C.B. ass'y	
12.	A-IC-021-00	IC, STK-4171MKV	
13.	E-JK-011-00	Speaker jack PJ-208AS	
14.	E-JK-007-00	RCA jack PJ-204NP	
15.	E-JK-009-00	RCA jack PJ-206NP	
16.	F-AL-015-00	Heat sink, Power IC	
17.	F-CH-013-00	Front chassis, A-X35MK2	
18.	Z-SB-018-00	LED P.C.B. ass'y	
19.	P-FR-010-00	Power switch frame	
20.	S-NT-003-00	H/P jack nut	
21.	S-WA-006-00	H/P washer	
22.	S-NT-004-00	VR nut	
23.	S-WA-004-00	VR washer	
24.	F-XT-003-00	Himelon cloth, (M)	
25.	P-KB-013-00	Push SW knob	
26.	P-FR-012-00	Push SW frame	
27.	F-XT-002-00	Himelon cloth (S)	
28.	F-XT-004-00	Himelon cloth (L)	
29.	F-CH-015-00	Side Chassis, right	
30.	Z-SB-012-00	Function P.C.B. ass'y	
31.	P-FR-011-00	Function SW frame	
32.	F-XT-008-00	Function SW spring	
33.	P-KB-025-00	Function SW knob	
34.	Z-SB-001-00	Main P.C.B. ass'y	
35.	F-AL-008-00	AL. panel A-X35MK2	
36.	P-KB-010-00	VR knob, (M)	
37.	P-KB-009-00	VR knob, (S)	
38.	P-KB-011-00	VR knob, (L)	
39.	E-JK-012-00	AC outlet	
40.	P-RB-003-00	AC cord busher	
41.	E-SW-013-00	Voltage select switch 110/220	
42.	P-RB-009-00	Earth screw	
43.	F-CH-012-00	Top chassis	
44.	F-ST-003-00	Button sheet	
45.	S-TB-003-00	Screw T/R 3×8 (B)	
46.	S-CZ-001-00	Screw T/CRS 3×6	
47.	S-MZ-003-00	Screw M/B 4×8	
48.	S-MB-001-00	Screw M/R 3×6 (B)	
49.	S-CZ-003-00	Screw T/CRS 3×10	
50.	S-TB-005-00	Screw T/R 3×15 (B)	
51.	S-SH-002-00	Screw holder M-4	
52.	S-MB-005-00	Screw M/R 4×6 (B) w/washer	
53.	K-XK-006-00	Owner's manual, A-X35MK2	
54.	K-PL-003-00	Side pack	
55.	K-PB-001-00	Ploy-bag, body	
56.	K-CT-015-00	Inner carton, A-X35MK2	
57.	K-CT-014-00	Outer carton, A-X35MK2	



## 9 PC BOARD AND PARTS LIST

## 9.1 MAIN AMP PCB



# A-X35mkII

REF. NO.	PARTS NO.	DESCRIPTION
IC301, IC304	A-IC-001-00	IC, LA 6458DS
IC302	A-IC-011-00	IC, LC7815
IC303	A-IC-002-00	IC, LC4066
Q101, Q201, Q301	A-TR-008-00	Transistor, 2SA935
Q303	A-TR-011-00	Transistor, 2SC2061
Q308	A-TR-009-00	Transistor, 2SD1043
Q309	A-TR-010-00	Transistor, 2SB1033
Q310	A-TR-008-00	TRANSISTOR 2SA935
Q501, Q601	A-TR-003-00	Transistor, 2SD734/2SC2120
Q301	A-TR-006-00	Transistor, 2SC536/2SC945
Q702	A-TR-005-00	Transistor, 2SA608/2SA733
D101, D201	A-DO-005-00	Diode, IN4148
D305	A-DO-013-00	Diode, IN4002
D306, D307	A-DO-005-00	Diode, IN4148
D315, D316, D317	A-DO-013-00	Diode, IN4002
D318	A-DO-006-00	Diode, IN60
D319, D320, D321, D322	A-DO-012-00	Diode, IN5402
D325	A-DO-005-00	Diode, IN4148
ZD301, ZD302	A-DO-002-00	Zener Diode 12V
ZD701, ZD702	A-DO-001-00	Zener Diode 6.2V
C101, C201	C-CM-030-10	Ceramic Capacitor 270P
C102, C202	C-EC-005-60	Elec. Capacitor 1 $\mu$ 50V
C103, C203	C-CM-025-10	Ceramic Capacitor 100P
C104, C204	C-CM-028-10	Ceramic Capacitor 180P
C105, C205	C-EC-009-40	Elec. Capacitor 10 $\mu$ /25V
C106, C206	C-ML-012-10	Mylar, 0.0082 $\mu$ /50V
C107, C207	C-ML-005-10	Mylar, 0.0022 $\mu$ /50V
C108, C208	C-EC-010-40	Elec. Capacitor 22 $\mu$ /25V
C109, C209	C-CM-030-10	Ceramic Capacitor 270P
C110, C210	C-EC-008-40	Elec. Capacitor 4.7 $\mu$ /25V
C111, C211	C-CM-030-10	Ceramic Capacitor 240P
C112, C212	C-EC-008-40	Elec. Capacitor 4.7 $\mu$ /25V
C115, C215	C-CM-030-10	Ceramic Capacitor 270P
C116, C216	C-EC-008-40	Elec. Capacitor 4.7 $\mu$ /125V
C123, C223	C-CM-029-10	Ceramic Capacitor 220P
C124, C224	C-CM-013-10	Ceramic Capacitor 10P/50V
C125, C225	C-ML-016-10	Mylar, 0.018 $\mu$ /50V
C126, C226	C-ML-024-10	Mylar, 0.082 $\mu$ /50V
C127, C227	C-ML-004-10	Mylar, 0.0018 $\mu$ /50V
C128, C228	C-ML-013-10	Mylar, 0.01 $\mu$ /50V
C131, C231	C-CM-033-10	Ceramic Capacitor 470P
C132, C232	C-EC-008-40	Elec. Capacitor 4.7 $\mu$ /25V
C133, C233	C-CM-025-10	Ceramic Capacitor 100
C134, C234	C-EC-013-40	Elec. Capacitor 100 $\mu$ /25V
C135, C235	C-CM-025-10	Ceramic Capacitor 100P
C136, C236	C-EC-012-60	Elec. Capacitor 47 $\mu$ /50V
C137, C237	C-ML-025-10	Mylar, 0.1 $\mu$ /50V
C138, C238	C-ML-018-10	Mylar, 0.027 $\mu$ /50V
C301, C302	C-EC-016-30	Elec. Capacitor 470 $\mu$ /16V
C303	C-CM-049-10	Elec. Capacitor 0.01 $\mu$ /50V
C304	C-EC-006-60	Elec. Capacitor 2.2 $\mu$ /50V
C306, C307	C-CM-049-10	Elec. Capacitor 0.01 $\mu$ /50V
C308	C-EC-009-49	Elec. Capacitor 10 $\mu$ /25V
C309	C-EC-008-40	Elec. Capacitor 4.7 $\mu$ /25V
C310	C-EC-018-30	Elec. Capacitor 2200 $\mu$ /16V
C315	C-ML-025-10	Mylar, 0.1 $\mu$ /50V
C316, C317, C318	C-EC-009-60	Elec. Capacitor 10 $\mu$ /50V
C319	C-EC-013-60	Elec. Capacitor 100 $\mu$ /50V
C320	C-EC-005-60	Elec. Capacitor 1 $\mu$ /50V
C322	C-CM-049-40	Ceramic Capacitor 0.01 $\mu$ /500V
C323	C-EC-009-60	Elec. Capacitor 10 $\mu$ /50V
C326, C329	C-EC-013-30	Elec. Capacitor 100 $\mu$ /16V
C328, C329	C-EC-020-60	Elec. Capacitor 470 $\mu$ /50V
C330, C331	C-CM-049-40	Ceramic Capacitor 0.01 $\mu$ /500V
C333, C334	C-EC-012-60	Elec. Capacitor 47 $\mu$ /50V
C340	C-EC-009-40	Elec. Capacitor 10 $\mu$ /25V
C501, C601	C-EC-008-40	Elec. Capacitor 4.7 $\mu$ /25V
FS301, FS302	E-FU-011-00	FUSE, 3.5A GMA
RJ-301	E-JK-009-00	RCA Jack, PJ-206NP
RJ-302	E-JK-007-00	RCA Jack, PJ-204NP
T-302	E-JK-011-00	Speaker Jack PJ-20BAS
JP-1 ~ JP-5	F-JP-002-00	Jumper Wire, 6m/m
L101 ~ L103, L201 ~ L203	F-JP-002-00	Jumper Wire, 6m/m
L105, L205	F-JP-002-00	Jumper Wire, 6m/m
W1 ~ W6	F-JP-003-00	Jumper Wire, 10m/m
W7	F-JP-004-00	Jumper Wire, 12m/m
W8 ~ W13	F-JP-003-00	Jumper Wire, 10m/m
W14	F-JP-005-00	Jumper Wire, 15m/m

REF. NO.	PARTS NO.	DESCRIPTION
W15	F-JP-004-00	Jumper Wire, 12m/m
W16	F-JP-005-00	Jumper Wire, 15m/m
W17 ~ W21	F-JP-003-00	Jumper Wire, 10m/m
W22, W23, W24	F-JP-004-00	Jumper Wire, 12m/m
W25, W26	F-JP-003-00	Jumper Wire, 10m/m
W27	F-JP-004-00	Jumper Wire, 12m/m
W28 ~ W35	F-JP-003-00	Jumper Wire, 10m/m
W36	F-JP-005-00	Jumper Wire, 15m/m
W37 ~ W40	F-JP-003-00	Jumper Wire, 10m/m
W41, W42	F-JP-004-00	Jumper Wire, 12m/m
W701	F-JP-003-00	Jumper Wire, 10m/m
CN-1	P-CN-003-00	Connector Base 4P
CN-2	P-CN-004-00	Connector Base 5P
CN-3	P-CN-001-00	Connector Base 2P
R101, R201	R-CB-042-20	Carbon Resistor 1/4W 2.7K
R102, R202	R-CB-057-20	Carbon Resistor 1/4W 47K
R103, R203	R-CB-029-20	Carbon Resistor 1/4W 220 OHM
R104, R204	R-CB-038-20	Carbon Resistor 1/4W 1.2K
R105, R205	R-CB-069-20	Carbon Resistor 1/4W 470K
R106, R206	R-CB-055-20	Carbon Resistor 1/4W 33K
R107, R207	R-CB-057-20	Carbon Resistor 1/4W 47K
R108, R208	R-CB-037-20	Carbon Resistor 1/4W 1K
R109, R209	R-CB-042-20	Carbon Resistor 1/4W 2.7K
R110, R210	R-CB-058-20	Carbon Resistor 1/4W 56K
R111, R211	R-CB-042-20	Carbon Resistor 1/4W 2.7K
R112, R212	R-CB-058-20	Carbon Resistor 1/4W 56K
R115, R215	R-CB-042-20	Carbon Resistor 1/4W 2.7K
R116, R216	R-CB-058-20	Carbon Resistor 1/4W 56K
R117, R217	R-CB-041-20	Carbon Resistor 1/4W 2.2K
R127, R227	R-CB-042-20	Carbon Resistor 1/4W 2.7K
R128, R228	R-CB-043-20	Carbon Resistor 1/4W 3.3K
R129, R229	R-CB-054-20	Carbon Resistor 1/4W 27K
R103, R230	R-CB-044-20	Carbon Resistor 1/4W 3.9K
R131, R231	R-CB-046-20	Carbon Resistor 1/4W 5.6K
R132, R232	R-CB-038-20	Carbon Resistor 1/4W 1.2K
R134, R234	R-CB-037-20	Carbon Resistor 1/4W 1K
R134, R235	R-CB-052-20	Carbon Resistor 1/4W 18K
R136, R236	R-CB-035-20	Carbon Resistor 1/4W 680 OHM
R137, R237	R-CB-052-20	Carbon Resistor 1/4W 18K
R138, R238	R-CB-041-30	Carbon Resistor 1/2W 2.2K
R139, R239	R-CB-041-30	Carbon Resistor 1/2W 2.2K
R140, R240	R-MR-001-40	Metal Resistor, 1W 4.7 OHM
R141, R241	R-XR-009-00	Cement Resistor, 3W 0.22 OHM
R142, R242	R-CB-029-20	Carbon Resistor 1/4W 220 OHM
R143, R243	R-CB-040-20	Carbon Resistor 1/4W 1.8K
R144, R244	R-CB-056-20	Carbon Resistor 1/4W 39K
R146, R246	R-CB-040-30	Carbon Resistor 1/4W 220 OHM
R301, R302	R-CB-033-20	Carbon Resistor 1/4W 470 OHM
R303, R304	R-CB-065-20	Carbon Resistor 1/4W 220K
R305, R306	R-CB-057-20	Carbon Resistor 1/4W 47K
R307, R309	R-CB-057-20	Carbon Resistor 1/4W 47K
R313, R314	R-CB-049-20	Carbon Resistor 1/4W 10K
R315	R-CB-073-20	Carbon Resistor 1/4W 1M
R316 ~ R319	F-JP-004-00	Jumper Wire, 12m/m
R321	R-CB-025-20	Carbon Resistor 1/4W 100 OHM
R322, R323	R-CB-037-20	Carbon Resistor 1/4W 1K
R324	R-CB-025-20	Carbon Resistor 1/4W 100 OHM
R325	R-CB-049-20	Carbon Resistor 1/4W 10K
R326	R-CB-066-20	Carbon Resistor 1/4W 270K
R327	R-CB-063-20	Carbon Resistor 1/4W 150K
R328	R-CB-056-20	Carbon Resistor 1/4W 39K
R329	R-MR-005-40	Metal Resistor 1W 1K
R330	R-CB-046-20	Carbon Resistor 1/4W 5.6K
R341	R-CB-008-20	Metal Resistor, 1W, 5.6K
R342	R-CB-037-20	Carbon Resistor 1/4W 1K
R343	R-CB-045-20	Carbon Resistor 1/4W 4.7K
R344	R-MR-003-40	Metal Resistor, 1W 220 OHM
R345	R-CB-037-20	Carbon Resistor 1/4W 1K
R346	R-CB-045-20	Carbon Resistor 1/4W 4.7K
R347	R-MR-003-40	Carbon Resistor 1W 220 OHM
R350	R-CB-049-20	Carbon Resistor 1.4W 10K
R351	R-CB-051-20	Carbon Resistor 1/4W 15K
R352	R-XB-002-40	Carbon Resistor 1W 120 OHM
R501, R601	R-CB-057-20	Carbon Resistor 1/4W 47K
R502, R602	R-CB-043-20	Carbon Resistor 1/4W 3.3K
R503, R603	R-CB-061-20	Carbon Resistor 1/4W 100K
R701 ~ R703	R-CB-053-20	Carbon Resistor 1/4W 2.2K
R704	R-CB-037-20	Carbon Resistor 1/4W 1K
R705	R-CB-049-20	Carbon Resistor 1/4W 10K

